estates and on land covered with *lalang* grass. It is from this latter the infection seems especially to come.

Other subjects occupying important places on the program were malaria, plague, leprosy, intestinal infections and bacteriology, fungus diseases and helminthology, and medical entomology. It was strange to see medicine and surgery relegated to minor places.

Generally speaking, the program indicated that much time, work, and money will be necessary before the various endemic and epidemic diseases will be under control. Even Java, with the most highly developed medical system in the tropics, must still be regarded as being in the pioneer state. The lack of education of the masses, combined with tropical conditions, are constant obstacles.

One incident of interest to physicians of California occurred when the executive council elected Dr. A. C. Reed of the Pacific Institute of Tropical Medicine, Hooper Foundation for Medical Research at the University of California, secretary for the United States.

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TYPHUS FEVER—IN MEXICAN RAILWAY CAMPS*

A NOTE OF A 1916 SURVEY OF SOME MEXICAN RAILWAY CAMPS—FOR THE CONTROL OF TYPHUS FEVER

By W. T. Cummins, M. D. San Francisco

IN consequence of the report that typhus fever had been present in the spring and summer of 1916 among some newly arrived Mexican immigrant laborers who were quartered along the Southern Pacific Lines, the writer was directed by the chief surgeon, Dr. F. K. Ainsworth, to proceed to Bakersfield, California. Dr. James G. Cumming of the California State Department of Health, Dr. H. F. Senftner of its Bureau of Communicable Diseases, and the writer began on October 1, 1916, to make a sanitary survey of the railroad's Mexican camps. The San Joaquin and Los Angeles Divisions were inspected from Traver to Calexico and Yuma. The writer alone inspected the camps of the Tucson division from Yuma to El Paso. Seven cases of typhus fever were seen on the San Joaquin division, and four others had been recently reported. None was seen nor had been recently reported on the Los Angeles division. Two cases on the Tucson division were seen and one had been recently reported.

Including a visit at El Paso and an inspection of the Mexican delousing station at Juarez, the survey lasted fifteen days during which thirty-eight camps were visited. At these camps an examination of the Mexican laborers and their families was made in reference to infestation, as

well as a survey of the surrounding sanitary conditions. Demonstrations were given at various camps for the purpose of educating the foremen concerning cleansing measures, including the hair clipping of male heads and the general use of 50 per cent coal-oil for bathing, together with the gasolining of shoes and clothing and the treatment of living quarters. Prior to this inspection, good work had been done in a number of camps through instructions which had been issued by the division engineers and road masters.

In order that information concerning sanitary measures might be more widely disseminated and coördination of the work promoted, the California State Department of Health, in coöperation with the Southern Pacific Company, issued a series of regulations for the control and prevention of typhus fever. These embodied concise but comprehensive instructions concerning bedding, beds, floors, personal cleansing measures, toilets, and garbage. Each foreman was instructed to supervise the carrying out of these measures every seven days. The company printed these instructions in Spanish and English and placarded them conspicuously in each camp. Observation camps were established and in these all newly arrived Mexicans were placed in practical quarantine for fifteen days, the incubation period of typhus fever.

During the above survey in California, the laborers examined were found to have a 35 per cent infestation with body lice, and 60 per cent with head lice. At the inspection by the California Department of Health on March 1, 1917, four months later, no infestation with body lice was noted and only one per cent with head lice. It was considered unnecessary to continue the stringent sanitary measures, but the company, on its own account, continued its supervision of camp hygiene.

From 1917 to 1930 inclusive, sixty cases, with six deaths, were reported to the California Department of Health from the entire state. One case of typhus fever was reported from the Southern Pacific Lines in 1917, and none has appeared since that time on the San Joaquin, Los Angeles, and Tucson divisions, where Mexican laborers predominate.

Southern Pacific General Hospital.

MIGRATION OF SWALLOWED NEEDLES*

REPORT OF CASE

By Joseph O. Hawkins, M. D.

AND

Leo L. Stanley, M. D.

San Quentin

THE question often arises as to the course taken by foreign bodies which are swallowed, especially so in the case of sharp objects such as needles or straight pins. The following case is reported as being of interest in this respect, since

^{*} This paper submitted by W. T. Cummins, M. D., Southern Pacific General Hospital, San Francisco.

 $[\]mbox{\ensuremath{^{\bullet}}}$ From the medical department of the California state prison at San Quentin.